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AUTHOR(S) R. H. Augustson

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Los Alamos Los Alamos National Laboratory
Los Alamos, New Mexico 87545

ROLE OF IAEA SAFEGUARDS IN CONFIDENCE BUILDING

**R. H. Augustson
Los Alamos National Laboratory
Los Alamos, NM 87545**

INTRODUCTION

In this paper, I will examine some attributes of confidence building and connect them with how the International Atomic Energy Agency (IAEA) interacts with its member states in carrying out its safeguards function. These interactions and the structure set up to define them help maintain and strengthen confidence between the IAEA and the member states and among these states.

CONFIDENCE-BUILDING ATTRIBUTES

If one describes the confidence-building process between persons, conditions like trust, respect, and affection would be considered important. For confidence building between nations, a different set of conditions might be more accurate and practical, such as:

1. Strong national motivation to work together for a common goal based on self-interest;
2. A formal structure in which each country feels in control of their involvement;
3. Close and continuing communication at political, diplomatic, and technical levels;
4. An understanding of the positions of the other countries so each member can reasonably predict reactions to various situations; and most important,
5. A feeling that each side is upholding its part of the bargain.

PERTINENT BACKGROUND OF THE IAEA

The IAEA was founded in 1957 to promote the peaceful uses of nuclear power worldwide as part of President Eisenhower's "Atoms for Peace" initiative. The IAEA gradually took on its safeguards verification role, with a significant increase in responsibility, when the Non-Proliferation Treaty (NPT) came into effect in 1968.¹

The IAEA is a United Nations (UN) organization, independent of the UN General Assembly, with its own membership and governing body. When a problem has been detected,

the IAEA Board of Governors reports directly to the UN Security Council. The IAEA continues its promotional functions, including technical assistance, nuclear safety facilitation, and research support, in addition to the important safeguards activities. Approximately 2000 people are employed by this organization; 450 work in the Department of Safeguards. The employees are considered international civil servants, and an effort is made to give representation to most of the approximately 100 member states.² Internal pressure among the states keeps the quality of the professional staff high. All professional safeguards staff have technical degrees. The IAEA is located in Vienna on the boundary of Eastern and Western Europe in neutral Austria.

The organization, location, and staff help to maintain credibility, and therefore confidence, that the IAEA can verify compliance to safeguards agreements.

CONNECTIONS BETWEEN IAEA SAFEGUARDS AND CONFIDENCE BUILDING

It should be understood that the IAEA safeguards regime aims to build confidence among politicians. It must satisfy heads of government that other member states are not diverting nuclear material to nonpeaceful uses. The IAEA uses technical means to carry out its safeguards functions always within a political framework.

1. Strong National Motivation

It appears that many nations have come to the conclusion that nonproliferation is in their best interest¹ and thus they have signed the NPT, even though it is discriminatory, having different conditions for weapons and nonweapons countries, and requires giving up some national sovereignty by allowing IAEA inspectors into their facilities. In spite of this, countries have signed and implemented the treaty provisions.

The treaty provides for technical assistance in nuclear power development to developing countries. This may offer an incentive to some countries to adhere to the safeguards regime. Being a signatory also gives a country a stronger voice in international nuclear-related issues, including the debate on arms limitations among the nuclear weapons states.

For the above reasons and others, much of the world has made a commitment to IAEA safeguards. This commitment seems to glue the member states to the IAEA even in politically turbulent times.

2. Formal Structures

The documents describing the conditions under which IAEA safeguards will be implemented are in place. These include the NPT itself, IAEA information circulars,³ and individual facility attachments. The documents are continually discussed and debated, but there is sufficient agreement to make the system work and for the member states to understand their responsibilities.

3. Close and Continuing Communication at Political, Diplomatic, and Technical Levels

The structure of the IAEA organization encourages communication, information exchanges, and involvement among a variety of different groups.

Member states maintain diplomatic missions to the IAEA and participate in board meetings and the annual general conference. The diplomats transmit political concerns to their counterparts and to the IAEA daily. The management at the IAEA has direct contact with national government agencies responsible for nuclear issues, for example, in the United States the DOE, NRC, ACDA, and State Department. On the technical level, 12 countries have support programs to develop technology to improve the inspection capability. At this level, scientists and engineers work closely with IAEA development staff and inspectors. Finally, the inspectors interact with facility operators worldwide, carrying back current information on the state of the nuclear industry.

The communication activity within the Vienna International Center is amazing. The most descriptive analogy would be a macroscopic neural network.

The most important consequence of the communication is the improved confidence that comes from being informed. Decisions can be made on current, complete, and reliable information.

4. Understanding the Positions of the Member States The interactions described above lead to an understanding between nations of their respective positions on nuclear-related issues. Because they have to work together often to resolve or at least understand sticky problems, the member states develop an appreciation for how other countries handle problems. This, in turn, gives an element of predictability to international relations, at least in the safeguards arena. Interestingly, the US and the USSR usually agree to support the IAEA role in nonproliferation. However, each country provides that support in different ways.

5. Guarantees Based on Verification

The verification based on inspections at nuclear facilities is the most important way in which the IAEA builds confidence.

Nuclear facilities report monthly to the IAEA on all movements and changes involving safeguarded nuclear material. The reported (declared) quantity and location of nuclear material are stored in the IAEA mainframe computer accountability system. Periodically, inspectors travel to a facility with an inventory listing. They update the listing, count all the items, and select items for verification measurements. The number of items selected is based on a statistical sampling plan designed to detect three levels of material diversion. Some measurements are made on the spot using nondestructive assay equipment and some items are sampled for chemical analysis. Items under seal are checked for tampering, and surveillance film is collected for review back at headquarters. All this information is compiled and analyzed. The end product is an inspection report stating whether the IAEA considers the quantity of declared material to be verified or not.

These on-site inspections are performed by 190 inspectors. Considering the number of nuclear facilities worldwide, this seems to be a big job for so few people.

Two features required of the verification system are transparency and credibility. Transparency implies that the member states know and understand the inspection procedure and how conclusions are reached. The facility-specific information and measurement data are held as confidential and not released, but the IAEA does publish its methods and criteria. Credibility involves independent verification, technically sound procedures, and competent, conscientious staff. The IAEA continually strives for credibility because it is fundamental in building confidence.

CONCLUSION

The IAEA is an example of an international organization that has promoted confidence building between major nations of the world. It seems that the IAEA is successful in confidence building because the member states continue to accept the requirements imposed by the safeguards system and publicly state their faith in its credibility. The IAEA has weathered difficult political situations including having the US delegation walk out of a general conference (1982). This success is at least partly due to having certain attributes built into its structure. These include a common goal accepted by the member states (nonproliferation), a wise contract (NPT), and an appropriate organization, that strives to be credible and transparent.

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